
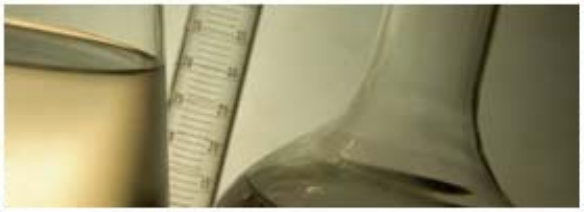

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Research Details :

Research Title : *RESISTIN AND ITS RELATIONSHIP TO OBESITY AND INSULIN RESISTANCE*

رزيستين وعلاقته بالسمنة ومقاومة الأنسولين

Descriptipn : Resistin is a recently identified adipocyte-derived hormone. It is 8-12 KD polypeptide. Resistin is postulated to link obesity to insulin resistance. Findings suggest that resistin is specifically processed and secreted as a functional export signal to increase insulin resistance. Its circulating level increases in relation to adiposity. Therefore, resistin was considered as the missing molecular link between obesity and type II diabetes mellitus. In this study, serum resistin level was analyzed in relation to age, weight, BMI, waist, hip, WHR, lipid profile, glucose, insulin and insulin resistance. The study included 45 healthy (24 lean, 21 obese) and 44 diabetic Saudi women. The results indicated that resistin levels were significantly different among the three groups, with highest level in diabetic women > obese > lean women. There was no correlation between resistin level and age in all study subjects. Pearson analysis showed that fasting serum resistin concentrations were correlated with BMI in obese and diabetic women. In all study subjects, highly significant positive correlations were found between fasting serum resistin concentrations and both fasting serum insulin concentrations and insulin resistance as measured by HOMA-IR. No correlation observed between fasted glucose and resistin concentrations in all studied subjects. This correlation was remained after controlling for insulin and insulin resistance in the three groups. However, after controlling for BMI, a significant positive correlation was shown in diabetic women between resistin and glucose. In lean and obese women, resistin levels were not correlated with weight, waist and hip whereas in diabetic women there were significant positive correlations with these three physical parameters. However, resistin concentrations were negatively correlated with WHR in diabetic women but no associations were found between them in lean and obese women. On the subject of the relationship of resistin levels with lipid profile, Pearson analysis revealed positive correlations of resistin with TG, cholesterol and LDL in lean women, and negative correlations with cholesterol and LDL in obese women In diabetic women, resistin did not show any correlation with any of lipid profile. In conclusion, the strong observed correlations between fasting serum resistin concentrations and BMI, insulin and insulin resistance suggests a possibility that resistin links obesity to diabetes in humans,